

Florida Keys National Marine Sanctuary



Review and Discussion
February 19, 2020



Florida Fish and Wildlife Conservation Commission

This is a review and discussion of the Florida Keys National Marine Sanctuary's (FKNMS) Restoration Blueprint, the FWC's role in managing the fisheries resources within the FKNMS, proposed regulatory actions, and next steps.

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Unless otherwise noted, images throughout the presentation are by FWC or Florida Keys National Marine Sanctuary.

FKNMS Process Reminder

- **Oct. and Dec.** – FKNMS discussions
- **Jan.** – FWC staff meetings with diverse stakeholder organizations
- **Today** – Look at all relevant aspects of plan and consider FWC's proposed response
- **April** – FWC comments due
- **Summer 2020** – FWC begin rulemaking process for state waters

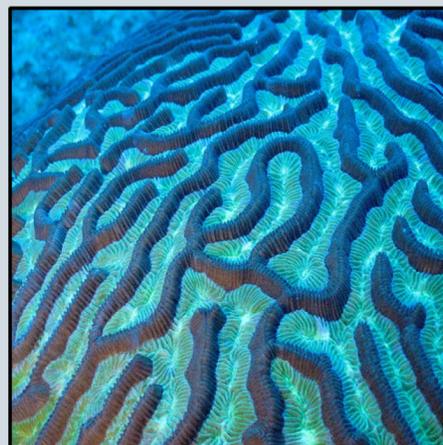


Photo courtesy: NOAA

As a management partner in the Florida Keys National Marine Sanctuary (FKNMS), FWC has been engaged in review of the Restoration Blueprint (Draft Environmental Impact Statement, DEIS) over the past several months. In October and December, the Commission discussed the FKNMS Restoration Blueprint. In January, FWC staff met with a variety of stakeholders to better understand their comments on particular issues addressed within the DEIS. Today, the presentation will cover all relevant aspects of the plan and staff recommendations based on a review of the science and stakeholder comments, which will be outlined in the next two slides. FWC requested and has been granted an extension for submitting agency comments to the FKNMS until April. Following the Commission's response to the FKNMS, FWC will consider rulemaking for fisheries management items state waters.

FWC Guiding Principles for Evaluating FKNMS Plan

1. Addressing ecosystem-level change a high priority
 - Water quality, water flow, coral loss
2. Fisheries management reserved to FWC in state waters
3. Consider closures and access restrictions on a case-by-case basis
4. Need to clearly define rationale for proposed actions
 - What issue is being addressed?
 - What has past experience taught us?
 - What are likely outcomes?
 - Evaluate relative to expected stakeholder impacts
5. Must be fair to all stakeholders



Here, we present the principles that the FWC is using to guide the development of our response to the FKNMS Restoration Blueprint. First, we acknowledge that it is important to address ecosystem-level changes that inherently have an impact on the marine resources of the Florida Keys, from the habitats to the fishes and invertebrates. Water quality, water flow, and coral loss are all factors that are influenced by conditions within and outside of the Florida Keys ecosystem. Addressing these factors are a high priority for the FWC and should be considered as the FKNMS proposals are discussed throughout this presentation. A second guiding principle is that fisheries management is reserved to the FWC in state waters. Third, area closures and access restrictions should be considered on a case-by-case basis after evaluating the science and potential ramifications of such actions. Fourth, as each proposal is discussed, the rationale behind the proposed actions should be clearly defined. This includes a clear description of the issues that are being addressed, what has been learned from past experiences, what the likely outcomes are, and an evaluation of the proposed actions relative to the expected stakeholder impacts. Finally, proposed actions must be fair to all stakeholders.

FWC Authority in FKNMS

- Authority to implement fisheries regulations in state waters of the FKNMS
- Limited authority to implement boating, habitat, and wildlife regulations



Photo courtesy: NOAA

As co-managers of the Florida Keys National Marine Sanctuary, FWC has authority to implement fisheries regulations within state waters. Furthermore, FWC has limited authority to implement boating, habitat, and wildlife regulations within state waters when such regulations are linked to our statutory authority of directly managing fish and wildlife.

Florida Keys National Marine Sanctuary Outline

1. Overarching FKNMS Issues

- Water quality
- Education
- Law enforcement

2. Enhancing Coral Reef Restoration and Recovery

- Protect reef areas
- Protect coral nurseries
- Manage restoration sites



3. Area Closures for Fisheries Management

- Large, contiguous areas
- Western Dry Rocks



Photo courtesy: NOAA

This presentation will focus on topics proposed in the Restoration Blueprint and how FWC staff recommends addressing them. First, overarching FKNMS issues will be discussed, including water quality, education, and law enforcement. Based on an extensive review of science and stakeholder comments, FWC staff will then present a three-pronged approach aimed to enhance coral reef restoration and recovery throughout the Florida Keys ecosystem. The presentation will then review several FKNMS proposed area closures at Carysfort Reef, Long Key Tennessee Reef, the Tortugas Corridor, and Western Dry Rocks.

Florida Keys National Marine Sanctuary Outline

4. Habitat and Wildlife Conservation

- Wildlife Management Areas
- Select appropriate places for no-motor or slow speed zones

5. FKNMS-wide Issues

- FKNMS boundary expansion
- Baitfish permits
- Fish feeding



Photo courtesy: NOAA

The presentation will then cover another large component of the Restoration Blueprint that focuses on shallow water habitat and wildlife conservation, which is addressed through the creation and/or modification of regulations in various Wildlife Management Areas (WMAs). Finally, FWC staff will review several proposals that address management across the entire FKNMS, including boundary expansion, baitfish permits, and fish feeding.

Overarching FKNMS Issues

Water quality

- Integral component of coral reef and nearshore habitat restoration and recovery
- Encourage FKNMS to take a leadership role in ensuring water quality is addressed

Education

- Education is a critical element of any management action



Bottom photo courtesy: NOAA

As discussed in previous presentations, there are several overarching issues affecting the Florida Keys that need to be addressed. Water quality is a key element that connects all sanctuary resources and is essential in maintaining the richness and diversity of the Florida Keys ecosystem. The environmental conditions of the FKNMS are impacted not only by local factors, but also by perturbations that originate from outside of sanctuary waters. The sanctuary is influenced by the Florida Current, the Gulf of Mexico Loop Current, inshore currents of the Southwest Florida Shelf, discharge from the Everglades through the Shark River Slough, and by tidal exchange with both Florida Bay and Biscayne Bay. Flood control modifications to the drainage of fresh water in the south Florida region have resulted in serious environmental effects due to altered water flow into the surrounding estuarine system, specifically Florida Bay. Large, persistent cyanobacteria blooms originating in Florida Bay have been associated with sponge die-offs and the associated community dependent on them. As these phenomena have been correlated with fish kills and seagrass die-offs, their increasing influence could put resources at risk that have not been so previously. Given the connectivity of the Florida Keys ecosystem with other areas, an increase in actions at a regional-scale and across multiple agencies is needed to address water quality issues. FWC encourages the FKNMS to take a leadership role in ensuring water quality is addressed. The diverse habitats of the Florida Keys, ranging from seagrass beds to coral reefs, serve as critical components of the ecosystem and their health influences the productivity of numerous marine resources. Without addressing poor water quality, any restoration or habitat protection efforts will be limited in terms of success and scope. Furthermore, FWC believes that education is another integral component of any management plan and it is not fully addressed within the Blueprint. Ensuring the general public understand the problems, what is being done to address the problems, and active engagement within the community will generate support for restoration efforts and spread awareness on issues that impact all of user groups. We encourage the FKNMS to work with FWC and other agencies to promote education of issues impacting the Florida Keys ecosystem.

Overarching FKNMS Issues

Law Enforcement

- Not enough FWC LE officers to monitor and enforce the regulations of the current FKNMS zones (3,800 sq. miles)
- Currently, 56 LE positions assigned to Monroe County to enforce regulations in the FKNMS
- FKNMS no longer funds FWC LE positions dedicated to the Sanctuary (historically 17 positions were funded)
- Additional LE patrol officers and equipment needed to patrol additional marine zones



Although not specifically addressed in the Restoration Blueprint, law enforcement issues are a source of concern that need to be addressed in concert with the proposed sanctuary expansion and any additional regulations. Presently, there are not enough FWC law enforcement officers to monitor and enforce the regulations of the current FKNMS zones. Currently, there are 56 law enforcement positions assigned to Monroe County as a whole to patrol the 3,800 square miles within the FKNMS, including 1 captain, 7 lieutenants, 1 pilot, 4 investigators, and 43 officers. Historically, FWC had as many as 17 dedicated FKNMS positions funded by NOAA. However, some of the positions were cut due to budget cuts from NOAA and others were absorbed. Consistently, at FKNMS stakeholder meetings, the issue of a lack of law enforcement has been a major concern. At this time, there is no mention of additional funds or resources to be allocated to law enforcement to increase their presence throughout the FKNMS. With the FKNMS proposed to be expanded by more than 700 square miles and many new areas and zones being added or modified, there will be a significant lack of staffing to provide sufficient patrols. Without additional support to increase law enforcement staff and equipment, the FWC will be unable to complete the necessary enforcement.

Coral Reef Restoration and Recovery

FWC staff recommendation

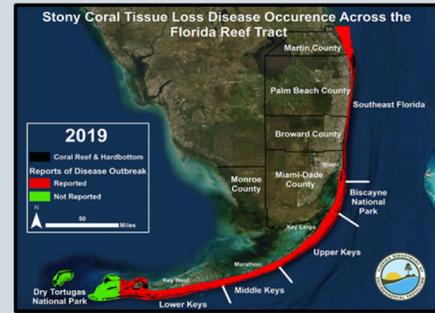
- Restoration and recovery of corals should be primary focus

Current last resort actions

- FWC leading, with a host of partners, an unprecedented coral rescue program
- Treating diseased corals with antibiotics
- Embarking on large-scale restoration efforts

Strategic closures needed to support current actions

- Protection of coral reef habitats from direct human impacts



Map courtesy of DEP

The Commission has received several presentations on the issues impacting coral reefs along the Florida reef tract. Warm and cold water bleaching events, Stony Coral Tissue Loss Disease (SCTLD), the aforementioned water quality issues, and direct human impacts, such as anchoring, fishing, and diver contact with reefs, have all negatively impacted the health of coral reef communities in the Florida Keys. The most recent Coral Reef Evaluation and Monitoring project, which has monitored the condition of coral reefs in the Florida Keys since 1996, determined that only 2% coral cover remain at their sites. To put this in a historical context, healthy Florida Keys reefs typically have ~30% coral cover. There are now seven Endangered Species Act-listed coral species and SCTLD has dramatically reduced many of the large, structure-forming corals. This has led to the unprecedented step that FWC has taken to remove healthy corals from the wild and place them at various aquariums around the country to preserve the genetic diversity of this essential component of the ecosystem. FWC staff believes that we are in a last resort scenario to rehabilitate and restore Florida's coral reefs. The Restoration Blueprint serves as an opportunity to address coral reef restoration and recovery at a large-scale and significant steps need to be taken to ensure that future generations are able to enjoy the services they provide.

Coral Reef Restoration and Recovery

Protect coral reef habitats

- Assess and prioritize current/proposed closed areas relative to the goal of coral reef restoration and recovery
- Protect listed species and resilient reefs

Protect coral nurseries

- Protect active nurseries and develop process for opening/closing future nurseries

Active restoration locations

- Work with FKNMS to develop process to assess coral reef restoration and determine next steps



Spawning coral outplants!

FWC staff recommends, in conjunction with addressing water quality, a 3-pronged approach for coral reef restoration and recovery in the Restoration Blueprint to compliment existing efforts. The first step includes protecting coral reef habitat, especially locations where resilient corals remain and reef areas that have been underrepresented in the current FKNMS marine zoning plan. The Blueprint has identified some of these areas for such protection. For example the plan includes protection for some of the deep reef environment. Those areas were recently assessed by FWC scientists and at each location they observed ESA-listed species and low incidence of Stony Coral Tissue Loss Disease. Those deep-reef corals are a likely source for wild coral larvae that can repopulate reefs that have been degraded and can be a source for gamete collection for active restoration efforts.

The second step involves protecting coral nurseries. The degree of coral decline throughout the Florida reef tract requires coordinated and methodological steps to be taken to salvage and propagate corals through transplanting colonies to depleted and/or damaged habitats. Many organizations are currently addressing coral reef restoration using nursery corals in an attempt to diminish or reverse population declines and accelerate the regrowth of the reef tract after chronic or acute disturbances. Enhancing protection of the coral nurseries through effective and standardized marking and establishing protective management actions will help ensure that coral restoration will be successful.

In addition to protecting coral reef habitat and coral nurseries, the development of best management practices associated with large-scale coral restoration sites should be developed. For example, during active restoration and while newly outplanted corals are still acclimating, additional management measures including temporary use restrictions may enhance restoration efforts. FWC staff would welcome working with the FKNMS and others to develop these management practices and determine consistent and fair means to apply them.

Coral Reef Restoration and Recovery

Actions to be considered

- At select coral reefs
 - No anchor zones
 - Idle speed, where applicable
 - No fishing, where applicable
- Coral nurseries
 - All of the above
- Active restoration locations
 - All of the above, plus relocate nearby mooring buoys
 - No-entry or transit-only in portion of reef being restored



Top photo: NOAA

Restricting access is viewed by staff as a last resort approach informed by scientific assessment and stakeholder engagement, but the current status of Florida's coral reef requires strong action. With this in mind, FWC staff recommend that at select coral reefs no anchor, no fishing/trapping, and idle speed zones (where applicable) be considered to minimize unintentional damage caused by boaters, divers, and fishers. Relative to coral nurseries, FWC staff believe these locations are paramount to the success of current and future restoration efforts. As such, FWC staff recommend that regulations, such as no anchoring, no fishing/trapping, and idle speed (where appropriate), are considered at these locations for the duration of time that the nurseries are active. Relative to active restoration locations, no anchor, no fishing/trapping, and idle speed zones (where appropriate) are recommended regulations to consider during periods of time when active restoration is occurring. Other ideas brought forth by stakeholders for consideration are to relocate nearby mooring buoys to direct public access away from restoration locations. Another idea is to have portions of the reef restored in a systematic approach, where access is restricted only in specific locations of the reef (i.e., a small portion of a larger reef community) where restoration is occurring. This would allow the general public will be able to view restoration in progress and will provide further stakeholder engagement opportunities.

Coral Reef Restoration and Recovery Staff Recommendation

Artificial reefs

- Support strategically placed artificial reefs to increase fish habitat and enhance recreational and diving opportunities
- Offset closed areas

High-use and overcrowding at reefs

- Do not only allow access to certain reefs by Blue Star operators
- Work with stakeholders and FKNMS to conduct research and develop plan to manage diver access



FWC staff recommends consideration of additional strategies to benefit coral reefs in the Florida Keys. These strategies are expanding use of artificial reefs and developing and testing strategies of managing diver numbers at high-use reefs.

Florida has one of the most active artificial reef programs in the nation and they serve to provide food, shelter, and habitat for fishes and invertebrates. These locations also serve as recreational and diving hotspots, potentially reducing pressure on coral reef communities. Furthermore, strategically placed artificial reefs could offset losses of areas that are closed to fishing and/or diving.

FWC staff recognize that management of diver access at existing high-use natural reefs is complicated. However, FWC staff believes that additional management strategies should be considered by FKNMS in lieu of only Blue Star Operators to access certain reefs, such as Sombrero Reef Sanctuary Preservation Area (SPA) and Sand Key Reef SPA. FWC would welcome the opportunity to work with stakeholders and the FKNMS to develop a plan to manage diver access at these high-use reefs and conduct research to determine their efficacy.

Area Closures for Fisheries Management

Large, contiguous habitat FKNMS proposals

- Carysfort Reef SPA
- Long Key Tennessee Reef SPA
- Tortugas Spawning Corridor SPA
- All partly in state waters

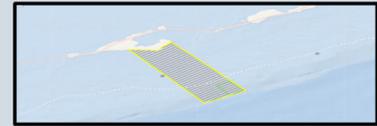
FWC staff recommendation

- Do not support at this time
 - Ecosystem and fisheries benefits for these 3 large areas poorly understood
 - Further ecological/social science needed to evaluate if large area management can be effective in the Florida Keys

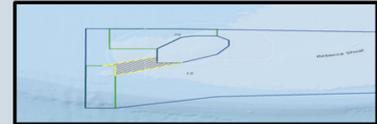
Carysfort Reef (17.49 sq. miles)



Long Key Tennessee Reef (9.57 sq. miles)



Tortugas Spawning Corridor (39.10 sq. miles)



Another topic that has generated considerable interest is the concept of protecting large, contiguous habitats. The FKNMS has proposed three separate areas for added protection, including Carysfort Reef SPA in the Upper Keys, Long Key Tennessee Reef SPA in the Middle Keys, and the Dry Tortugas Spawning Corridor SPA in the Tortugas region. At each of these locations, regulations would include current SPA regulations (such as no fishing) and new SPA regulations (such as idle speed and no anchor). At this time, FWC staff are not supportive of these proposals. Firstly, FWC views large idle speed zones through high-transit marine thoroughfare zones, such as Hawk Channel, and in relatively deep areas as a particularly burdensome regulation for stakeholders. Idle speed regulations should only be considered in areas where disturbance to the bottom and/or to wildlife or human safety are of particular concern. Secondly, FWC believes that closing large areas to fishing be considered only as a last resort to address specific resource issues. To this point, the ecosystem and fisheries benefits for these particular areas have not been well defined. FWC staff recommends that further research and engagement be conducted to better understand the fisheries, ecological, and social science needed to determine if and where the protection of large, contiguous habitat can be an effective management tool in the Florida Keys.

Area Closures for Fisheries Management

Western Dry Rocks – FKNMS proposal

- Prohibits fishing and anchoring within Western Dry Rocks (2.24 sq. miles)
 - Trolling only exemption

Background

- State waters
- Popular fishing location

FWC staff recommendation

- Remove from FKNMS Restoration Blueprint
- FWC could consider alternative management options



Species	J	F	M	A	M	J	J	A	S	O	N	D
Black grouper												
Scamp												
Nassau grouper												
Gag grouper												
Red hind												
Yellowtail snapper												
Mutton snapper												
Gray snapper												
Schoolmaster												
Atlantic spadefish												
Permit												



Another area in the Lower Keys to discuss today is the proposed Western Dry Rocks Wildlife Management Area, which would create a protected area around a portion of the outer bar at Western Dry Rocks (2.24 sq. miles). Western Dry Rocks is within state waters and is an important fishing area and spawning area. This proposal would prohibit fishing and anchoring within the WMA to meet one goal by the FKNMS to protect benthic habitat and fish spawning aggregations. However, there could be an exemption for “trolling” within the WMA. Western Dry Rocks is an area containing a well-developed, continuous reef, with areas of high coral cover and diversity. It is an important multi-species aggregation site for mutton snapper, grey snapper, mahogany snapper, permit, goatfish, spadefish and black grouper. Many of these species spawn at different times of the year. For example, many snappers spawn in the summer whereas grouper peak spawning occurs in the winter and early spring, as depicted in the figure. FWC considers an area closure at Western Dry Rocks amounts to fisheries management in state waters, which is under the purview of FWC. As such, FWC believes that this proposal should be removed from the Restoration Blueprint so FWC can go through our own process to determine if added protection at Western Dry Rocks is warranted. As part of the FWC process, numerous options could be considered including no anchoring and seasonal closures.

Habitat and Wildlife Conservation

FKNMS proposals

- Creation of Wildlife Management Areas (WMAs) and/or modification of regulations at existing WMAs
- Regulations are area/resource-specific
 - May include no-entry, transit only, no-motor, idle speed, and no-anchor zones
- Majority within National Wildlife Refuges

FWC staff recommendation

- Consider on a case-by-case basis
- Balance resource needs and user access



Top photo courtesy: NOAA

Another set of proposals focuses on protections in Wildlife Management Areas (WMAs) throughout the Florida Keys. FKNMS proposes to create new WMAs and modify the marine zones/regulations at some existing WMAs. Regulations for WMAs would vary by zone to protect seagrass, hardbottom, and other critical shallow water habitats and associated wildlife, including fish, birds, and sea turtles. The access restrictions proposed to be implemented in each WMA, pertain to the specific resource protection goals at each location, and would include potential regulations of idle speed/no-wake, no-motor, no-anchor, transit only, and no-entry zones. Disturbance and direct impacts (including prop scarring, groundings, turbidity, water quality degradation, disturbance, etc.) to these shallow areas by vessels are believed to be contributing factors to a decline in the Keys of birds, fish, and other animals dependent on these habitats. Wading bird populations in south Florida have significantly declined and boat traffic near rookeries can flush adult birds from nests, leaving their chicks vulnerable to predation or exposure. In a white paper, FWC avian scientists concluded “that although some species may become habituated to certain disturbances over time and not all disturbances negatively affect population growth, the potential serious effects of disturbance and the large variability in response among species and individuals warrants a conservative approach to setting buffers and setback distances.” Additionally, some of the proposed areas also protect sea turtle nesting beaches from human impact. The lower Keys backcountry WMAs are mostly located within one of the National Wildlife Refuges and are designed to assist the Fish and Wildlife Service with their management responsibilities. Many of these WMAs are similar to the goals and management in FWC Critical Wildlife Areas. However, FWC staff recommends that regulations at specific locations balance resource needs with user access as many of these areas are popular recreational and fishing locations. Furthermore, additional research is needed to evaluate the effects of the proposed regulations (e.g., idle speed vs. slow speed zones) in promoting habitat and wildlife conservation.

FKNMS-wide Issues: Boundary Expansion

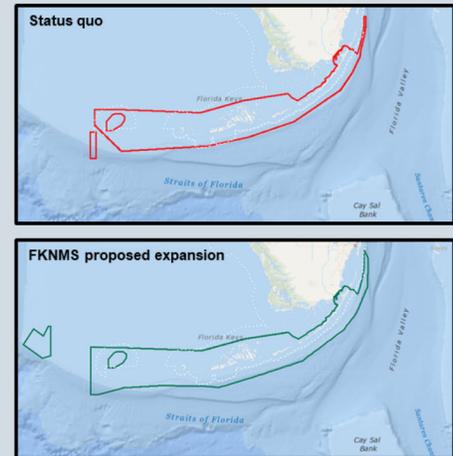
FKNMS proposals

- Expand oceanside external boundary
- Westward shift in the boundary of Tortugas South Reserve
- Incorporate Pulley Ridge (no anchor zone)

Background

- Prohibit discharge from vessels
- Reduce impact of large vessel groundings
- Prevent anchor damage in Pulley Ridge

FKNMS Options



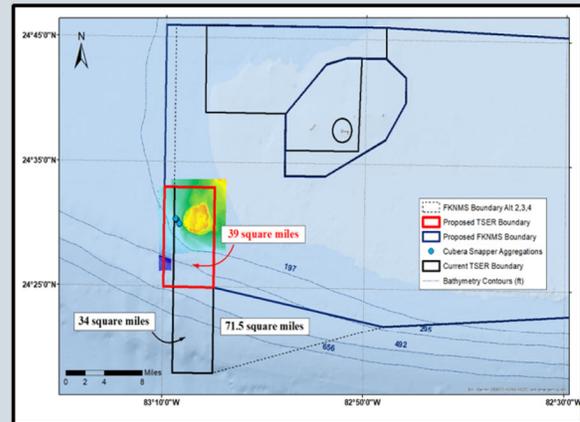
The next topic to be discussed is the FKNMS boundary expansion. Under FKNMS' preferred proposal, the sanctuary boundary would be expanded by approximately 741 square miles. By expanding the boundary, the expanded boundary will align with the "Area to Be Avoided" (ATBA) and "Particularly Sensitive Area" (PSSA), plus ~1 mile westward shift around the Tortugas South Ecological Reserve. The ATBA is an existing demarcation where large vessels (over 50 m) are prohibited due to several past large ship groundings in this area. The PSSA is an existing demarcation established by the International Maritime Organization designed to protect marine resources of ecological or cultural significance from damage by ships. By co-locating the boundary with these existing demarcations, the complexity of the various boundaries will be reduced, and the additional protections provided in the FKNMS-wide regulations will be in effect.

FKNMS is also considering an option that would add Pulley Ridge to the FKNMS and prohibit all anchoring in this area to further protect deepwater coral reef ecosystems. Regulations set by the Gulf of Mexico Fishery Management Council (GMFMC) and implemented by NOAA Fisheries (not FKNMS) prohibit use of bottom gear (i.e., traps, trawls, and bottom longlines) and anchoring by fishing vessels in a large area of Pulley Ridge. The U.S. Secretary of Commerce recently approved measures that prohibit use of bottom gears (except bottom longlines, which have historically been used in this area by commercial grouper fishermen) and anchoring by fishing vessels in part of Pulley Ridge. When these changes are implemented by the U.S. Secretary of Commerce, the area of Pulley Ridge with GMFMC-set regulations would match the area proposed to be added to the FKNMS. The GMFMC does not have authority to prohibit anchoring by other vessels as proposed by FKNMS.

FKNMS-wide Issues: Boundary Expansion

FWC staff recommendation

- Open access to portion of Tortugas South Ecological Reserve and adjust proposed boundary accordingly
- Incorporate Pulley Ridge into FKNMS
 - Protect some of deepest reefs in continental U.S.
 - Prohibit anchoring



Considerations for the Commission regarding this proposal are that the slight westward expansion in Tortugas Ecological Reserve South incorporates newly-discovered spawning aggregations of black grouper and cubera snapper located along the western edge of Riley's Hump. There has been a dramatic decline in percent of living coral from 2003-2015 at Pulley Ridge. FKNMS aims to prevent additional damage to this productive and sensitive habitat by prohibiting anchoring by all vessels (including large, non-fishing vessels not under the authority of the Gulf of Mexico Fishery Management Council) in this region. Overall, FWC staff supports the boundary expansion proposed by FKNMS, including Pulley Ridge, with modifications to better protect the resources of the FKNMS and improve management of the Florida Keys ecosystem. FWC has heard comments from fishers who object to the sanctuary boundary expansion due to concerns about future restrictions that may influence their ability to fish within sanctuary waters. As a result, FWC staff proposed the idea to stakeholders to open access to a portion of Tortugas South Ecological Reserve (shown in figure) and adjust the proposed sanctuary boundary accordingly. In general, there was support for the proposed modifications to Tortugas South Ecological Reserve and subsequent sanctuary boundary adjustments as this would allow for fishing opportunities in an area that has been closed to fishing since 2001. The incorporation of Pulley Ridge into the FKNMS would benefit one of the deepest coral reef ecosystems in the U.S. from anchor damage caused by non-fishing vessels.

FKNMS-wide Issues: Baitfish Permits Phase-Out

FKNMS proposal

- Phase-out of permits over a 3-year period

FWC staff recommendation

- Support lampara net baitfishers ability to fish in SPAs
 - Limited-access fishery
 - Contact with reef by lampara nets is unlikely
- Concern with cast net impacts to coral reefs
 - Staff recommends phasing out cast net permits in SPAs



Bottom photo courtesy: Bionic Bait

The second FKNMS-wide topic to be discussed is the proposed changes to recreational and commercial baitfish permits. The proposal aims to phase-out (over the course of a three-year period) issuing permits that allow harvest of baitfish (e.g., ballyhoo, pilchards) within 18 current Sanctuary Preservation Areas. This proposal does not impact the ability of fishers to fish for bait outside of SPAs. The rationale for this proposal is to have consistency in regulations at all SPAs and to reduce user conflict between the commercial and recreational fishing and diving communities. The FKNMS currently issues two types of baitfish permits: cast net/lampara net and hair hook. Cast net/lampara net permit holders are currently allowed to harvest baitfish in all 18 SPAs. It should be noted that FWC also issues a limited-entry lampara net endorsement in state waters. FWC staff recommends that lampara net baitfishers should be allowed to fish within designated SPAs due to the fact that contact with the reef is unlikely. However, staff has concerns about impacts to coral reefs and hardbottom habitat by cast nets, which are typically designed to sink quickly to capture bait, and thus recommends phasing out use of this gear as proposed by the FKNMS.

FKNMS-wide Issues: Fish Feeding

FKNMS proposal

- New regulation would prohibit feeding of sharks, or other marine species while diving **and/or** from any vessel

Background

- Current state regulations don't extend into waters

FWC staff recommendation

- Support FKNMS proposal
 - Consider updating FWC rules for state waters



Photo courtesy: NOAA

The final sanctuary-wide proposed regulation that will be discussed in this presentation relates to fish feeding. FKNMS would implement a new regulation to clarify prohibitions specific to the practice of fish feeding. The act of fish feeding has been shown to change the behavior of fish, sharks, and other animals and has caused human safety issues. In addition, recreational fish feeding has been shown to increase the frequency of predation of fish being fed and may cause fish to become malnourished, stressed, and even cause death. To address the potential impact that the feeding of fish, sharks, or other marine species poses for human safety, the environment, and changes in behavior of such species, NOAA would update its regulations to prohibit the feeding of fish, sharks, and other marine species from any vessel AND/OR while diving. Currently, there are regulations in state waters that prohibit the act of fish feeding while diving, but no such regulations exist in federal waters of FKNMS. FWC defines fish feeding as “the introduction of any food or other substance into the water by a diver for the purpose of feeding or attracting marine species, except for the purpose of harvesting such marine species as otherwise allowed by rules of the Florida Fish and Wildlife and Conservation Commission.” It should be noted that FKNMS’ preferred proposal is slightly more restrictive than the current state regulations. The FWC fish feeding prohibition is only applicable with divers in the water, whereas the FKNMS rule language denotes the practice of feeding fish while diving AND/OR from a vessel. In the past, FWC has supported and advocated for federal legislation that would prohibit fish feeding in federal waters. FWC staff are supportive of the proposed FKNMS regulations and recommends that FWC consider updating statewide regulations to be consistent with that of the FKNMS.

Partial Summary of FWC Comments to FKNMS

- FWC will consider fisheries actions in state waters
- Additional LE funding needed
- Address water quality and education in plan
- Management recommendations to support coral reef restoration and recovery
- Expansion of FKNMS is supported, but give back portion of TSER
- Comment on baitfish permits and fish feeding
- Request FKNMS provide updates on progress every 5 years
 - All management actions would be reconsidered at that time



After a thorough review of the science available and through stakeholder engagement, here we provide a partial summary of FWC comments to the FKNMS which has been discussed throughout this presentation. First, FWC believes that fisheries management items within state waters are to be under the purview of the FWC and should be removed from the FKNMS Restoration Blueprint. FWC will consider fisheries actions in state waters and consider a multitude of fisheries management options through stakeholder engagement. As has been highlighted by numerous stakeholders, FWC believes that for the Florida Keys ecosystem to receive that maximum amount of benefit from this plan, additional law enforcement funding is needed and water quality and education need to be specifically addressed. Due to the ongoing plight of Florida's reef tract, FWC staff recommends many actions be considered under the lens of coral restoration and recovery. Part of these actions includes adding a process for designating and removing protections at coral nursery areas such that public access is only temporarily restricted during times of active restoration. Furthermore, FWC recommends that no anchor and no fishing be considered at these sites to mitigate accidental damage at nursery and restoration sites. FWC supports added protections to the environment through the expansion of the sanctuary boundary to include Pulley Ridge. This would protect sensitive deep water coral habitat from large, non-fishing vessels that anchor in the region. However, FWC has proposed a modification to the proposed sanctuary boundary expansion by giving back a portion of Tortugas South Ecological Reserve. FWC will provide comments on the FKNMS proposed baitfish permits and fish feeding. As part of this process, FWC requests that FKNMS provides updates on progress made every five years such that management actions can be evaluated to determine what is working and what is not.

Potential FWC Rulemaking Items for State Waters

Existing SPAs

- No anchoring

New/Expanded SPAs

- No anchoring
- No fishing
- No trapping

Additional Rulemaking Items

- Western Dry Rocks – Consider less restrictive action
- Fish feeding regulations



Photos courtesy of Coral Restoration Foundation

FWC staff recommends several items within state waters be considered for rulemaking by the Commission. These regulations include adding no anchor zones to protect coral reefs in existing SPAs. A no anchor regulation does not currently exist, but FKNMS is proposing to update these rules in all SPAs. FWC staff believe that if the Commission implements these rules in sensitive coral reef areas, they will provide added ecosystem benefits to the entire Florida Keys and help protect the Florida reef tract from accidental damage caused by boaters, divers, and fishers. Similarly, FKNMS is proposing to create several new SPAs and expand the areas of some SPAs to better protect coral reef habitat. For new SPAs or expanded SPAs in state waters, FWC could consider implementing regulations such as no anchor, no fishing, and no trapping in these areas. Additional rulemaking items for the Commission to consider are less restrictive fisheries management actions at Western Dry Rocks and changes to Florida's fish feeding regulations to align with the proposed FKNMS regulations.

FWC Involvement with Federal Councils

- FWC work with Councils to consider fisheries rules in federal waters
- FWC and Council may hold joint workshops



Throughout the entire FKNMS process, FWC staff have worked with the South Atlantic Fishery Management and Gulf of Mexico Fishery Management councils to understand the position of various user groups. FWC will continue to work the federal councils to consider fisheries rules in federal waters and proposes holding joint workshops to accomplish this.

Next Steps for FWC

FWC proceeding with fisheries management rules in state waters

- FWC workshops this summer
- Draft rule in fall
- Work with Councils to hold joint workshops for fisheries rules in federal waters

FWC work with FKNMS on

- Updating management agreements
- Next version of Restoration Blueprint
- FKNMS draft rule for non-fisheries items



Photo courtesy: NOAA



The next steps for FWC are to proceed with fisheries management rules in state waters. As part of the FWC process, public workshops would be held in the summer with the aim of having a draft rule in place for various management actions in the fall. As previously mentioned, FWC would work with our federal partners on fishery management Councils if they agree, and hold joint workshops for fisheries rules in federal waters. As the FKNMS process continues, FWC will work with the sanctuary on updated management agreements. FWC will also work with FKNMS on the next version of the Restoration Blueprint and offer comments for draft rules that are non-fisheries items.

Staff Recommendation

- Input requested today on FKNMS Restoration Blueprint
- Staff work with Chairman on finalizing FWC comment letter by April 30
- Use FWC rulemaking for fisheries items; begin process in summer 2020



Photo courtesy: NOAA

At today's review and discussion, input is requested from the Commission on the proposals put forward in the FKNMS Restoration Blueprint. Staff request the ability to continue to work with Chairman Spottswood on finalizing the FWC comment letter, which is due by the end of April. Staff also recommends using FWC rulemaking on items related to fisheries management within the Restoration Blueprint with the goal of initiating the process in the summer of 2020.